AKV2100PC

THE TRIPP PLASTICS AUTO KENO SYSTEM

AUTO KENO

WITH VISION

USER MANUAL AND SERVICE GUIDE

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The Tripp Plastics AKV2100PC Auto Keno System

User Manual and Service Guide

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Introduction

The AKV2100PC represents an exciting new level of security and ease of use for the Keno industry. With the addition of special upgrades to the keno and player tracking system in the casino, the AKV2100PC can be installed to provide automated ball draws with unparalleled speed and accuracy.

Operation Cycle

- The keno operator informs the Keno System to begin a new game by pressing the appropriate key on the console.
- The AKV2100PC wheel rotates, dumping all balls from the previous game back into the bowl.
- The blower turns on high speed for a short time to lift and mix the balls.
- After the short delay, the blower slows down to normal running speed and the wheel moves into the first position.
- When a ball is captured in the pocket, the vision system processes the ball's image so its identification can be made. When the ball's identity is confirmed, the number is sent automatically to the Keno System just as if the operator had pressed that number's key.
- After all 20 balls are drawn and identified, the blower will turn off and the AKV2100PC will be ready for the next game.

Tripp Plastics is continuing to upgrade and improve its product line and as a result, this manual may not reflect the most recent change to the AKV2100PC. Any required upgrades to this manual will be provided as needed.

System Components & Assembly

Drawings have been included in this manual to assist the user in locating and identifying the various components used in the AKV2100PC (see Drawings in the Table of Contents).

The AKV2100PC System consists of 5 standard components:

1. The Wood Base and Glass Bowl assembly
2. The AKV2100PC Controller
3. The Blower Motor Assembly
4. The Auto Keno Upper Assembly
5. The Video Monitor

The glass bowl is very fragile and must be handled with care to prevent breakage.

Unpack all boxes and become familiarized with all of the parts by referring to Dwgs. **100-10253** and **150-10634**. The assembly of these parts will now be discussed.

1. If holes have not yet been cut into the counter top to accept the Wood Base, they must be cut before continuing. A cutting template drawing is available for this purpose.

2. If the Wood Base is already attached to the Glass Bowl, skip to step 8.

3. Locate the Electrical Conduit Assembly (see Dwg. 100-10253, Item 6). There is a long cord which comes out of the bottom of the conduit and has a circular connector on the end. Route the cord through the hole of the Wood Base as shown in Dwg. 100-10253.

4. Place the Glass Bowl onto the Wood Base so that it is on top of the Venturi Dish (item 2, Dwg. 100-10253).

5. Attach the Electrical Conduit Assembly to the Glass Bowl mounting flange using two 8-32 flat head screws (item 8, Dwg. 100-10253). By doing this, the Glass Bowl will be oriented properly on the Wood Base before attaching the Bowl Collars.

6. Place the 2 Bowl Collars (item 3, Dwg. 100-10253) around the bottom flange of the Glass Bowl where it meets the Wood Base. Be sure they are arranged as shown in Dwg. 100-10253 and ensure the two foam cushions are placed between the wood and the glass. Tighten them down to the Wood Base using eight 8-32 machine screws (item 10, Dwg. 100-10253). This will secure the Glass Bowl to the Wood Base.

7. Place a Collar (item 7, Dwg. 100-10253) around the Conduit Tube (item 6, Dwg. 100-10253) and secure it while holding it tightly against the Wood Base. Repeat this procedure with another Collar on the opposite side of the Wood Base. These two collars will prevent the Conduit Tube from moving up or down through the Wood Base.

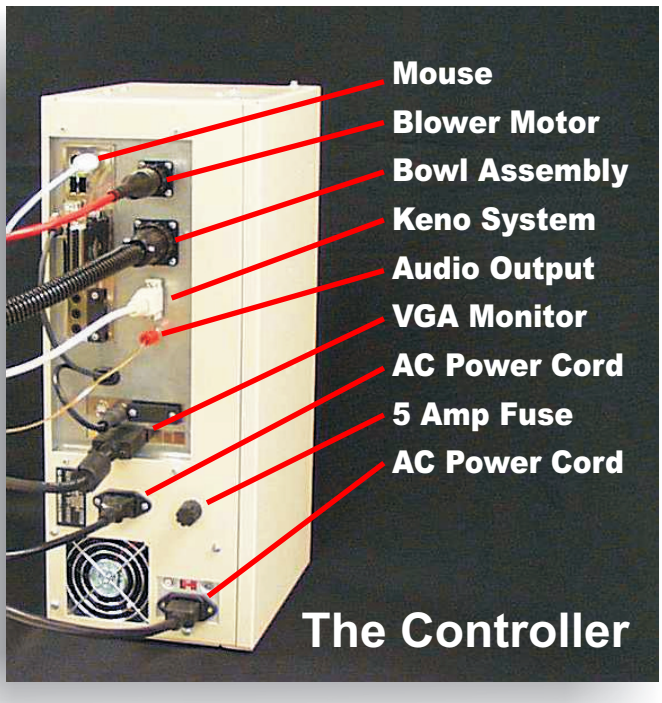
8. Place the Wood Base and Glass Bowl Assembly onto the counter top, being careful to route the electrical cable through the hole first. Gently guide the cable through the hole so it does not become trapped underneath the Wood Base as it is put into place.

9. Put the Blower Motor Assembly (item 4, Dwg. 150-10634) in place and cut the hose (item 5, Dwg. 150-10634) to length.

10. Put the two Hose Clamps (item 6, Dwg. 150-10634) on the hose, then attach the hose between the Blower Motor Assembly and the Venturi (item 5, Dwg. 100-10253).

11. Tighten the two Hose Clamps around each end of the hose where it meets the Venturi and the Blower Motor Assembly.

12. Place the AKV2100PC Controller (item 3, Dwg. 150-10634) under the counter below the Wood Base/Glass Bowl Assembly. The location of the AKV2100PC Controller must allow for air to flow freely into the air inlet on the front of the unit and out through the fan on the rear. The AKV2100PC Controller may be positioned either upright or on its side. Locate the unit with its front panel easily accessible from the operator's position.



13. Place the UPS back-up power supply near the AKV2100PC Controller.

14. Connect the Blower Motor Assembly cable to the back of the AKV2100PC Controller.

15. Connect the cable coming from the

Glass Bowl Assembly to the back of the AKV2100PC Controller.

16. Connect both AC power cords to the sockets on the back of the AKV2100PC Controller.

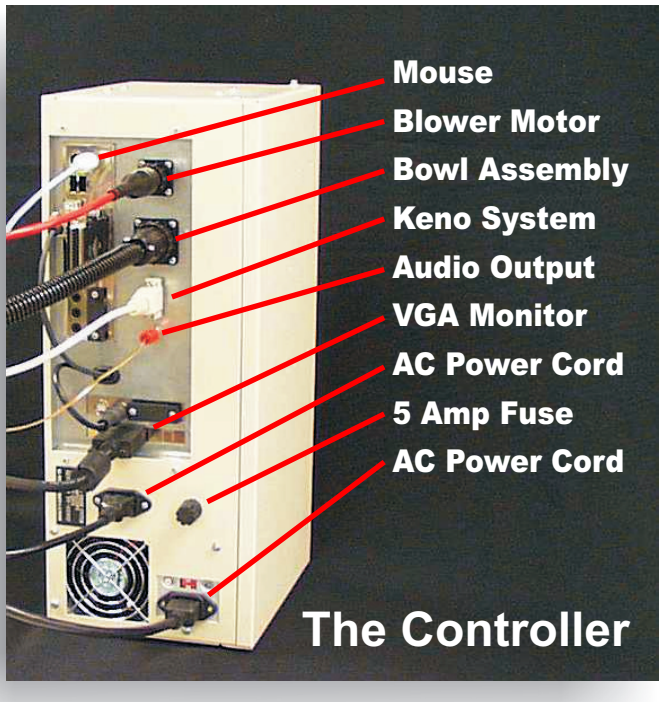
17. Connect both AC power cords for the AKV2100PC Controller to the UPS

18. Check the fuse holder contains a 5A fuse.

19. Connect the Keno System to the Keno System connector on the back of the AKV2100PC Controller.

20. Connect the mouse to the mouse port on the AKV2100PC Controller.

21. Connect the monitor to the rear of the AKV2100PC Controller.



22. If your AKV2100PC was supplied with the VOICE option, connect your PA/System to the RCA audio jack on the rear of the AKV2100PC Controller.

23. Place the keno balls into the Glass Bowl.

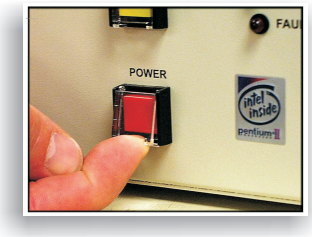
24. Place the Auto Keno Upper Assembly onto the Glass Bowl being careful to mate the connectors properly. Use straight up and down movements when installing or removing the Upper Assembly.

Ball Cleaning and Waxing

Upon initial installation, the keno balls need to be waxed with the supplied Buckskin™ product. The only other product we recommend for this is Tuf-Coat™. Apply the wax liberally to each ball. After it dries, buff each ball with a soft cloth.

The keno balls must be cleaned on a regular basis. The cleaning interval varies with the site location but will generally be needed once per week. If the Windjammer blower is located near a restaurant, some greases and oils will be drawn into the system that may greatly increase the number of times the balls need to be cleaned. Clean the balls by putting them in a solution of water and detergent such as Tide™. Clean all the balls to remove any build up of wax and dirt. Rinse and dry the balls, then wax them with the supplied Buckskin™ product. The only other product we recommend for this is Tuf-Coat™. Apply the wax liberally to each ball. After it dries, buff each ball with a soft cloth.

System Startup



1. Ensure the power switch is in the ON position at the rear of the Controller.

2. Flip the protective cover on the POWER switch up as shown.

3. Turn the system on by pushing the POWER switch as shown, then flip the protective cover on the POWER switch back down.

4. During Power up, the front panel LED's will light up in a distinctive pattern. Upon pressing the POWER switch the POWER LED will light up. The HDD LED will light each time the Hard Disk Drive is accessed. At this time the ACTIVE LED will begin to flash. This flashing will continue until the AKV2100PC has communicated with all the system components including your Keno System Console. The system startup will take a few minutes to complete. When the process is complete the ACTIVE LED will stop flashing and the READY LED will light up. If the READY LED does not turn on after the ACTIVE LED stops flashing, check the cable connection to the Keno System.

5. The monitor will display the KenoApp window and the AKV2100PC is ready to begin game play.

Camera Lens Adjustment

In most cases, the camera lens will never need to be adjusted. Do not adjust the lens unless directed to do so by our support staff.

1. Make sure the system is off by performing the System Shutdown Procedure (see Table of Contents).

2. Remove the wheel assembly from the glass bowl. Carefully remove the glue on the camera lens rings so the adjustment rings can be turned.

3. Manually place the wheel in position 1 by turning the wheel motor by hand.. With the wheel removed from the glass bowl, place a keno ball into the position 1 pocket and secure it in place with some tape so it will stay in place as you put the wheel back on top of the glass bowl.

4. Connect a standard Windows mouse to the mouse port on the back of the Controller and turn the system on. See System Startup, above.

5. Using the mouse, click on the "live" button in the upper right corner of the KenoApp window on the monitor. The keno ball image will now be shown on the monitor.

6. The image should be displayed in sharp focus. If the image is not in sharp focus, the lens will need to be adjusted. Adjustments are made by turning the lens body using the knurled ring closest to the front of the lens (farthest from the camera body.) Once the focus has been set, continue with step 7.

7. Adjust the iris for optimum light entry into the camera. Turn the lens body using the knurled ring closest to the camera body while watching the image on the monitor. Open the iris, making the

image on the monitor brighter, until you see "Hot Spots" or places in the image that are washed out by the light. Now, slowly close the iris, making the image darker, until the hot spots disappear. Refer to the images below to help obtain the proper iris setting.

8. Apply a high quality silicone adhesive glue to the lens rings to lock them into position. There must be a continuous band of glue from the adjustment rings to the lens body to lock the rings in place.

Blower Speed Adjustment

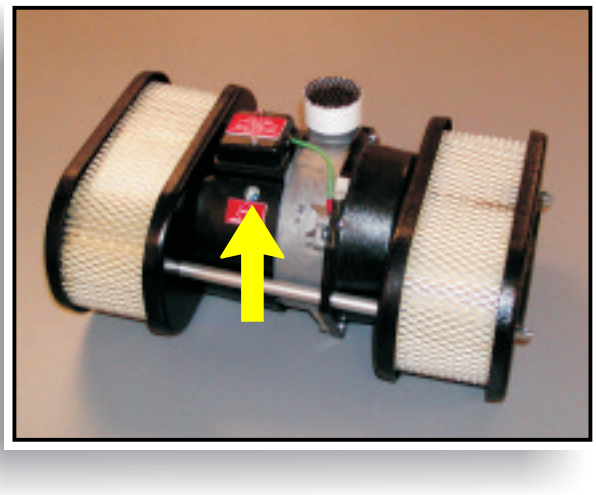
The front panel of the AKV2100PC Controller provides the operator with options to fine tune the operation of the game.

The “AIR SPEED” control is used to adjust the airspeed flowing through the balls. Adjust the speed of the blower while a game is in progress. After the game is started, the ACTIVE light will be on during the high speed blower premix. Wait for this light to go off and the blower motor to slow down before adjusting the air speed. This occurs when the wheel moves to the first pocket position. The setting of the air speed is a compromise between game length and ball life. Faster air flow will provide faster games with shorter ball life. Slower air flow will slow down the game but will increase ball life. Choose the appropriate setting using the AIR SPEED knob. Typically, the games should always be finished in under one minute and 15 seconds. Measure this time from

the moment the wheel begins to move into position 1 until the last ball is identified and the wheel moves to the home position.

The "AIR ALWAYS ON" switch will allow the blower motor to run even if the AIR SPEED control becomes faulty. In its NORMAL, or off position, blower speed is adjusted using the AIR SPEED control knob. If the AIR SPEED control should become inoperative, place the AIR ALWAYS ON switch in the AIR ALWAYS ON position to run the game. This will cause the air speed to always be on full power. The AKV2100PC should be repaired as soon as possible if the speed control fails.

Depending on the altitude where this equipment installed, it may be necessary to adjust the blower speed setting on the blower motor. During the high speed blower premix, the blower is on full speed. If the keno balls are breaking too often, the high speed can be adjusted by turning the speed control with a small screwdriver. The arrow at right shows the location of the speed control. The best way to adjust this speed control by first placing the AIR ALWAYS ON switch in the on position. Then, adjust this speed control for the desired top speed of the blower.



Note: if this control is adjusted, overall blower speed will be affected and this may require readjustment of the AIR SPEED knob while a game is in progress.

Front Panel Indicator Lamps

There are five indicator lights that provide the following information:

POWER - This light is on whenever power is being supplied to the AKV2100PC controller.
READY - This light indicates the unit has connected to the Keno System.
ACTIVE - This light indicates the unit is currently busy.
HDD- This indicates that the hard drive is busy.
FAULT - This light will illuminate if some part of the system is not functioning properly.

Upon applying power to the system, the POWER light will come on. The ACTIVE light will flash on and off while the AKV2100PC checks for a connection to your keno system. When this link is established, the ACTIVE light will turn off and the READY light will turn on. This indicates the system is ready to begin game play. The operator may notice the blower motor pulse on for a very short time upon power application. This is normal. Some Keno Systems allow the operator to clear the wheel and allow it to sit empty until a new game is requested. Other Keno Systems may not provide this option, causing the wheel to clear and a new game to begin immediately. As soon as the new game is requested by pressing the appropriate button on the Keno System keypad, the ACTIVE light will come on until the AKV2100PC is ready to begin game play. The blower motor will now turn on and the game will proceed.

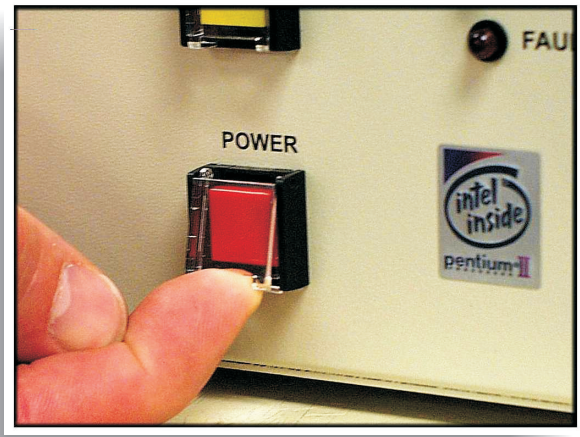
Important: The AKV2100PC will ignore all commands sent to it from the keno system while the ACTIVE light is on.

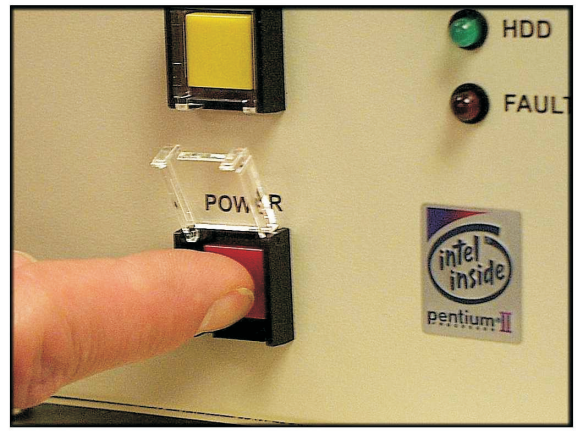
System Shutdown Procedure

When it becomes necessary to turn off the AKV2100PC system, such as when removing the wheel assembly from the top of the bowl, lift the clear plastic cover over the red POWER button on the front of the AKV2100PC controller. Press the red POWER button in and promptly release it.

The Windows XP operating system will now begin to shut down. When the green POWER light turns off, you may remove the wheel assembly or perform other service procedures.

If the AKV2100PC controller is not shut down properly before removing the wheel, the blower motor could turn on which would cause all the balls in the bowl to be distributed throughout the keno lounge area. The voice output of the AKV2100PC controller can become garbled if the wheel assembly is removed without first turning off the controller.





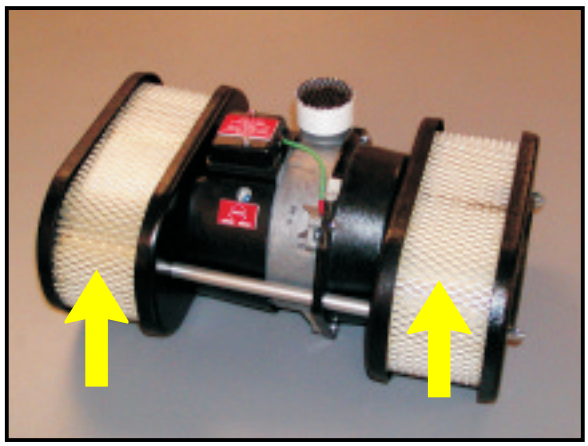
Periodic Maintenance

The AKV2100PC system requires some maintenance to be performed on a regular basis in order to provide trouble free service. The schedule of your maintenance will depend upon your location. This will have to be determined by careful observation after the system is in place.

As a starting point, we recommend these minimum service intervals.

Service Item	Service Interval
Blower Unit Filters	Every six months
Controller Filter Pad	Every six months
Controller Internal Cleaning	Every six months
Flourescent Lamp Replacement	When color changes
Wheel Assembly Cleaning (including optics)	Weekly
Ball Cleaning	Weekly
Glass Window Replacement	Annually

Blower Unit



Because of the Blower Unit constantly blowing air through the system, some dirt is going to be collected inside the glass bowl and upper assembly. The amount of this dirt will depend upon how clean the environment is around the system. For the first several weeks, inspect the filters on the Blower Motor weekly and replace them when dirt is observed on the outside surfaces of the filters. Note this time period and replace the filters on a regular basis thereafter. These filters are identified by the yellow arrows in this picture.

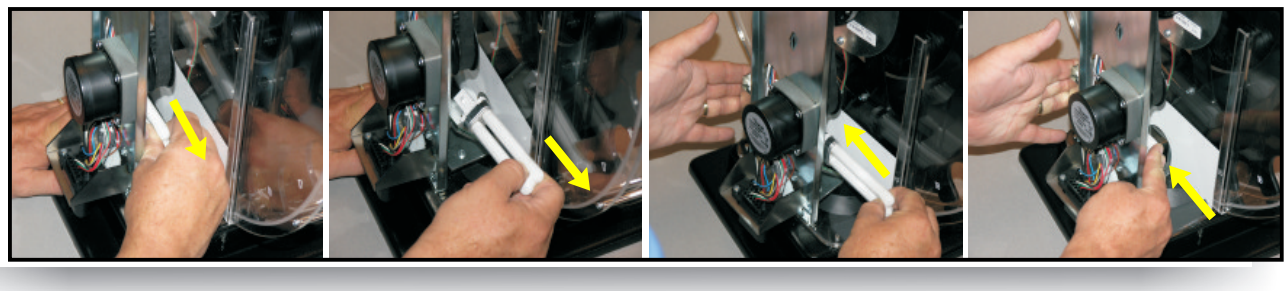
Controller

The AKV2100PC CONTROLLER has a filter on the front which should be inspected for dust buildup weekly and cleaned as needed. The CONTROLLER needs to be cleaned inside periodically by lifting its top cover and blowing it out with compressed air to remove any dust buildup.

Flourescent Lamp

The Flourescent lamp in the upper assembly will grow dim over time. When the light output fades, the lamp should be replaced. Use only the proper replacement lamp . Some brands put off a brownish light which will adversely effect game speed. Replacement part number is 275-11054.

Lamp Removal **Lamp Installation**



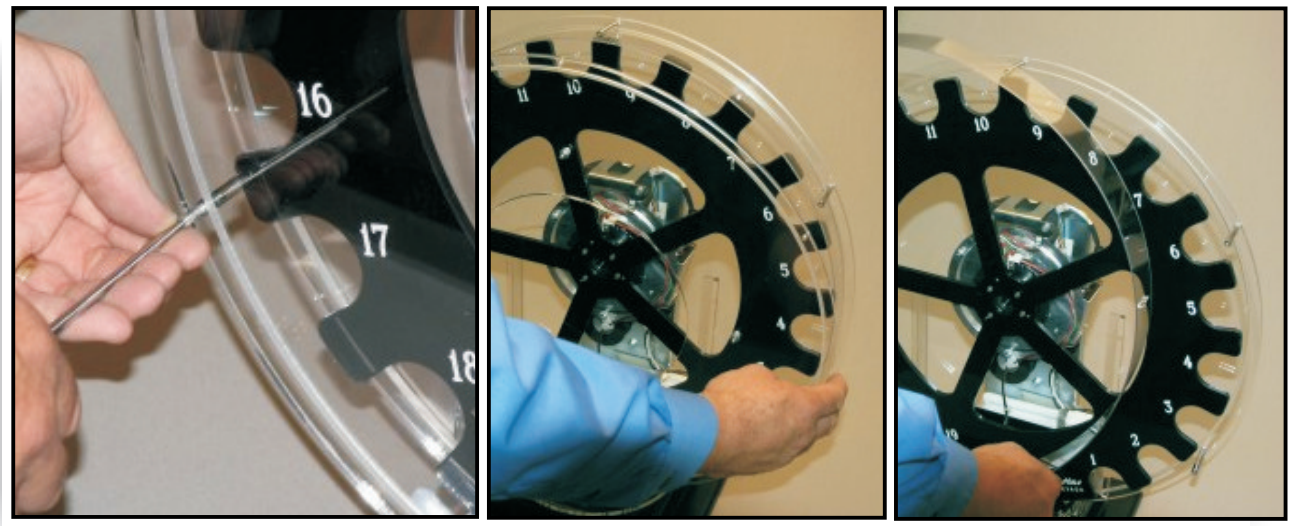
Upper Assembly (Wheel)

The AKV2100PC UPPER ASSEMBLY needs to be cleaned inside periodically by removing its top cover and blowing it out with compressed air to remove any dust buildup. Cleaning the inside of the upper assembly will be necessary when dirt accumulation is noticed inside the unit.

Disassembly

1. Remove the Motor Cover (item 32, Dwg. 150-10478).
2. Unscrew the three thumb screws holding the Upper Assembly to the Glass Bowl.
3. Remove the Upper Assembly from the Glass Bowl by lifting straight up until the harness connector is disconnected.
4. Place the Upper Assembly onto the Service Stand. Remove the four acorn nuts and lift the Front Cover off of the unit as shown below.

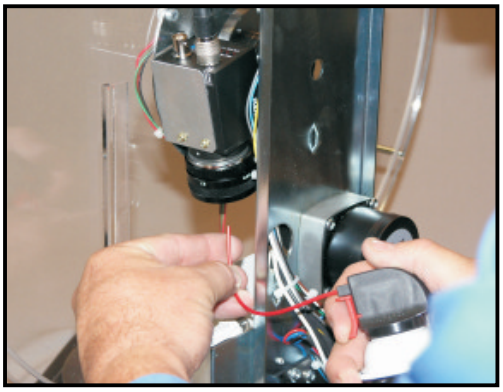
5. Remove the 7 screws securing the Front Panel. Remove the Front Panel and the Wheel Strip as shown below.

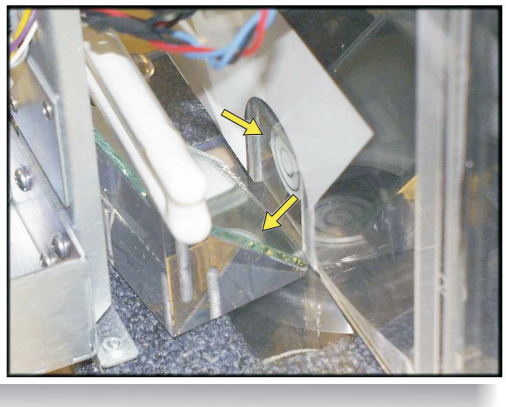


6. Remove the 4 screws securing the Wheel and remove it by lifting it off of the 3 locating pins protruding from the Wheel Spacer as shown below. NEVER remove or loosen the screw indicated by the yellow arrow.

7. CAUTION: Use a very soft, lint free cloth for cleaning the plastic parts or scratching may occur. Clean all of the items removed using mild soap and water or "Brillianize" cleaner. Be sure to dry all parts completely before assembly using a soft cloth.

10. Clean the Camera Lens using Brillianize on a soft cloth. Wrap the cloth around your index finger, then spray some Brillianize on the cloth. Gently clean the camera lens with the moist part of the cloth, then dry it with a dry section of cloth. Finish the camera lens cleaning with a blast of canned air to make sure it is dry.
11. Clean the Mirror on the Mirror Assembly .
12. Clean both sides of the glass window directly in front of the Mirror Assembly (see yellow arrows below).





13. Clean the lens on the Ball Optic using Brillianize on a rag wrapped around your fingertip.
14. Using compressed air, blow off the surfaces of the optic detectors on the Optic Assembly (see red arrow below). Be sure to blow air on both the front and back of the timing wheel (see yellow arrow below).

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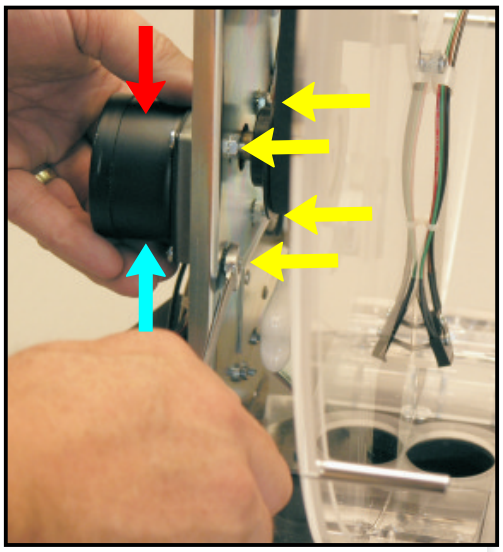
15. Reverse the disassembly order to put the unit back together. Special care must be taken while tightening the screws during assembly. Do not over tighten these screws or there will be risk of cracking the plastic. A snug fit is all that is required when tightening

Bowl Assembly

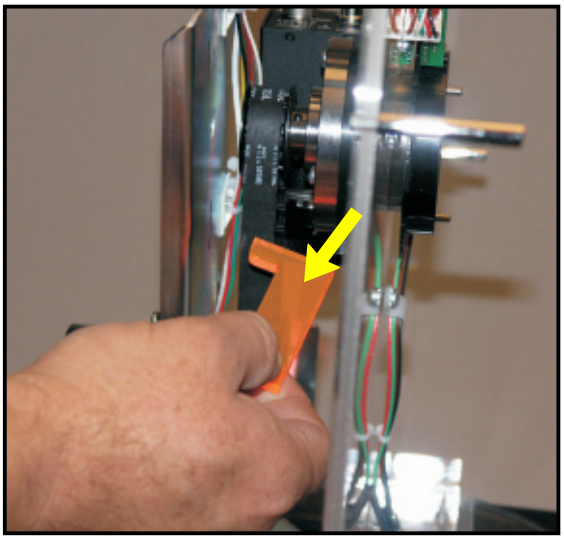
The Bowl Assembly should be cleaned periodically.
1. Remove the Upper Assembly.
2. Remove the balls from the Glass Bowl. Clean the inside of the bowl using a soft cloth and regular glass cleaner or Brillianize. Be sure the inside of the bowl is dry before replacing the balls.

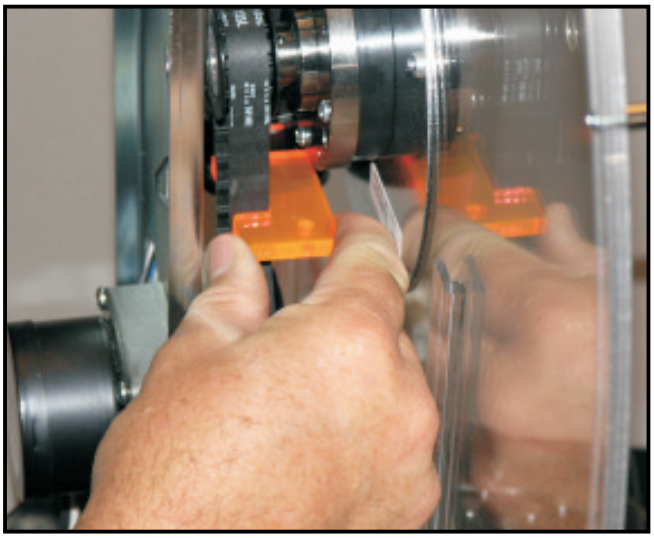
Wheel Motor Drive Assembly



The Wheel Motor Drive Assembly does not require maintenance. The information provided here will assist you if the drive belt requires replacement or adjustment. To replace or tension the belt, loosen all four nuts holding the motor in place until the motor is able to be moved up and down (blue and red arrows) in its mounting holes. Do not remove the nuts from the threaded posts (yellow arrows) . Your tool kit includes a wrench for this purpose.

To obtain proper belt tension, use the belt tension gauge (yellow arrow below). Place the belt tension gauge onto the drive belt as shown below. This will pre-tension the drive belt. After the gauge is in place, hold downward force on the motor (red arrow) and tighten the four motor mount nuts. Remove the belt tension gauge and put it back into your toolkit.





Radio Interference

As with any electronic device, radio interference above a given amount can cause system instability. Our equipment filters out radio interference from the environment when kept at a standard level. If, however, the signal gets too strong, the wheel may skip pockets and you will have an invalid ball draw. The use of personal communication devices such as cell phones and walkie-talkies must be kept at least three feet away from all Auto Keno equipment.

The Rubber Throat

The Wheel Assembly utilizes a rubber throat to gather balls during a draw and guide them into the wheel pocket. The rubber throat is located immediately below the hole where balls pass through on their way to the wheel pocket. If this throat is mishandled while performing service or maintenance on the Wheel Assembly, it can become distorted and prevent balls from moving smoothly through it. This may slow down your game because balls will not be able to quickly get into the pocket of the wheel. This may also prevent balls from dropping back into the bowl during a wheel dump.

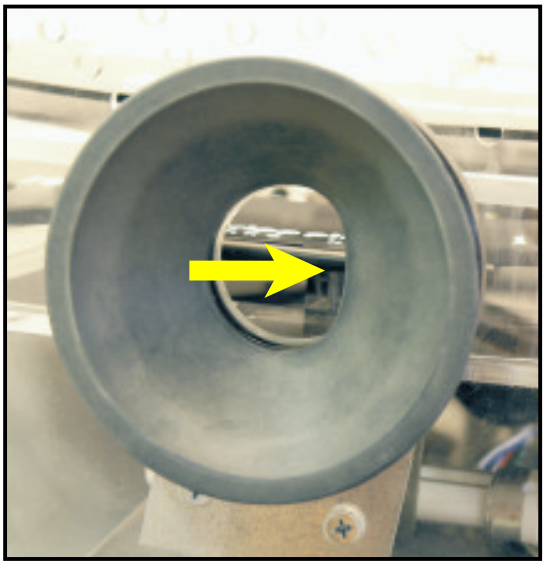
The yellow arrow indicates an area on the rubber throat that has become distorted. The hole through the throat is no longer round. This lip extending out into the hole will tend to disrupt the ball movement through the hole. The center picture shows how the rubber throat can be adjusted back into place by pulling the distorted area back into position.

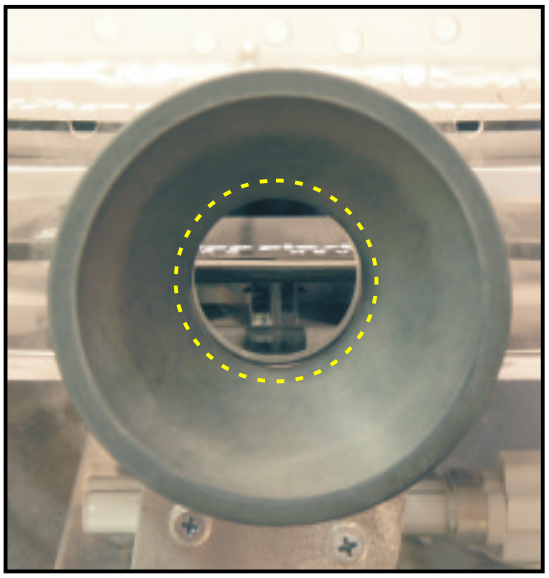
The bottom picture shows the rubber throat after it has been adjusted. The hole through the center is round again, as indicated by the yellow circle.

When removing the wheel assembly from the glass bowl for service, make sure to lift it high enough so the rubber throat does not contact the opening of the glass bowl.

It is very important to check this rubber throat each time the wheel assembly is moved around or serviced. Check the rubber throat as the last item before placing the wheel assembly back onto the glass bowl.

We have changed the process used to manufacture the rubber throat assembly. The original design shown in this document allowed the rubber throat to be replaced. After several years in the field, we have found this rubber throat does not wear out. Therefore, we simplified our production process and now manufacture a throat assembly that will not distort when mishandled because the rubber portion is glued in place. If you wish to purchase the new assembly, ask for part number 326-15888.





Training Classes

Tripp Plastics provides free training at our Sparks, Nevada facility by appointment. All aspects of operation and maintenance of your AKV2100PC system are covered in this class. We utilize a hands on approach to help new and existing customers with all these topics. Please contact our Auto Keno sales team for more information.

Troubleshooting

The Operator may occasionally experience problems with the AKV2100PC and/or the keno system to which it is attached that will interrupt normal game play. This can be caused by random power problems or static discharges and are usually recoverable. Please refer to the instructions supplied with the keno system to recover a game that may be in progress. If it is found the keno system is working properly, the AKV2100PC may need to be reset.

Before proceeding, place the switch below the air speed knob into the **AIR ALWAYS ON** position. This will prevent the balls from the current game from falling back into the bowl before the game can be recovered. Now the **RESET** button on the AKV2100PC can be pressed to force the interface computer to be reset. The game should now be recoverable by following the instructions that came with your keno system.

On rare occasions, the AKV2100PC will need to be shut down and restarted to resume game play. To perform this function, press and release the red power button on the front of the controller. After about 2 to 3 minutes, the **READY** lamp will turn on and you will be able to begin game recovery by following the instructions that came with your keno system.

If the AKV2100PC seems to be “locked up” and will not turn off by pressing the red power button, the only option available to reset the AKV2100PC controller is to turn it off and on again. To force the controller to turn off, press and hold the red power button in until the power light turns off. When the AKV2100PC is turned off the blower will no longer run. If there is an un-finished game in progress, the power to the AKV2100PC must not be off for more than 5 seconds. You must, therefore, press the **POWER** switch again within 5 seconds to turn the system back on. After about 2 to 3 minutes the **READY** lamp will turn on and you will be able to begin game recovery by following the instructions that came with your keno system.

Wheel problems

Symptom: The wheel does not turn.
Solution(s):
1. If the lamp behind where the balls enter the wheel pocket is off, check the fuse located on the back panel of the AKV2100PC System Controller. Replace with a 5 amp rated fuse.
2. Make sure the wheel motor connector is fully seated.
3. Tighten the pulley setscrews. There are two pulleys with a belt around them.
4. Make sure the belt tension is properly set (see Wheel Motor Drive Assembly).

If you cannot resolve this problem, replace the Upper Assembly (wheel) with your spare and send the faulty one to our Repair Facility (see Table of Contents).

Symptom: The wheel turns but does not stop at a pocket or home.
Solution(s):
1. Clean the wheel position optic assembly (see Periodic Maintenance).
2. Make sure both connectors are plugged in on the wheel position optic assembly.
3. Restart the controller by pressing and releasing the red power button. After the controller turns off, press the red power button again to turn it back on.

If you cannot resolve this problem, replace the Upper Assembly (wheel) with your spare and send the faulty one to our Repair Facility (see Table of Contents).

Symptom: The wheel turns and stops at pocket positions but when going to home position, it only turns a little way then stops.
Solution: The left hand screw in the wheel position optic assembly mount is metal and shorting one of the PCB traces to ground. Replace with a nylon screw.

Symptom: The wheel turns slowly or erratically.
Solution(s):
1. Tighten the pulley setscrews. There are two pulleys with a belt around them.
2. Make sure the belt tension is properly set (see Periodic Maintenance).

If you cannot resolve this problem, replace the Upper Assembly (wheel) with your spare and send the faulty one to our Repair Facility (see Table of Contents).

Symptom: The wheel turns and stops at the pockets but the pockets are not lined up with the hole where the balls pass through.
Solution: Call our Auto Keno service department to schedule repair (see Repair Facility).

Symptom: The rubber strip fell off or is coming off the bottom of the wheel, under our logo.
Solution: Remove any loose particles where the rubber strip fell off and glue with a small amount of perma-bond or super glue.

Ball problems

Symptom: Balls break.
Solution: Your keno balls will eventually break under normal conditions. However, if you feel the balls are breaking too often, slow down the airspeed during game play (see Blower Speed Adjustment).

Symptom: Balls broken - jamming wheel.
Solution: Remove the broken pieces by first removing the front panel (see Upper Assembly (Wheel)).

Symptom: Balls don't rise high enough to get into pocket.
Solution(s):
1. The graphics panel stand-offs are missing, allowing the graphics panel to touch the front panel. Replace stand-off nuts.
2. Replace the air filters on the blower motor (see Blower Unit).
3. Make sure the rubber throat is not distorted. (see The Rubber Throat).

Symptom: The balls don't rise at all.
Solution(s):
1. The blower hose may have fallen off. Make sure it is securely attached at both ends.
2. The blower motor cable has become disconnected from the controller or has become faulty.
3. The blower motor may have failed. Replace it with your spare blower unit.

Symptom: The balls do not drop freely during dump.
Solution: Make sure the rubber throat is not distorted. (see The Rubber Throat).

Symptom: The balls are rising but not entering pockets.
Solution: Make sure the rubber throat is not distorted. (see The Rubber Throat).

Symptom: A ball is stuck halfway into bottom pocket.
Solution: Make sure the rubber throat is not distorted. (see The Rubber Throat).

Reading problems

Symptom: The game time is too long (always over 1 minute, 15 seconds).
Solution(s):
1. Remove your surveillance department's video connection to the controller or wheel.
2. Make sure the graphic panel is not mounted so it is touching the front panel. This will make it very difficult for a ball to come into the pocket.
3. Replace old, worn out balls with new ones.
4. Clean the Upper Assembly (wheel).
5. Clean the lens of the camera.
6. Adjust the camera lens (see Camera Lens Adjustment).
7. Clean the balls.
8. Replace the glass window if it is scratched or has a flaw on it.

Symptom: There are occasional long read times for a ball.
Solution: It is normal to have occasional long read times for a ball. If this happens more than once every game, see "The game time is too long", above.

Symptom: A ball number is being read more than once.
Solution: The wheel is not turning properly. See Wheel Problems under Troubleshooting.

Symptom: The ACTIVE light will not come on when a ball is in the pocket.
Solution(s):
1. Check the ball detect optic. Make sure it is plugged into the wheel detect optic assembly.
2. Your controller may require the replacement of R8 on interface PCB with a 100K ohm resistor.

Symptom: The first ball in pocket 1 is read, second ball in pocket 2 does not read, game hangs.
Solution: Replace ball detect optic or change R8 on interface PCB with 100k ohm resistor.

Game problems

Symptom: "Duplicate Spot Error" or similar message displayed on Keno Console.
Solution: Determine why the wheel is not turning.

Symptom: The system stops working during a game.
Solution(s):
1. If the wheel position is incorrectly detected, this could cause the system to think a ball has not been captured. This happens when the wheel position is off so far that the next ball does not get captured. The wheel stops moving before the next ball can get captured. Determine why the wheel is not moving properly.
2. Replace the cable between the AKV2100PC controller and the Keno System.
3. Replace the fuse on the rear panel of the AKV2100PC controller.
4. Restart the controller by pressing and releasing the red power button. After the controller turns off, press the red power button again to turn it back on. Be sure to put the Air Always On switch in the ON position before restarting the controller. Also, turn the controller on right away to prevent a ball from falling back into the bowl.

Symptom: The wheel does not always stop to pick up a ball. It is skipping pockets.
Solution(s):
1. Do not use cell phones or walkie talkies too close to the game. RF interference will cause a pocket to be skipped.
2. Clean the wheel detect optic assembly (see Upper Assembly (wheel)).
3. Make sure both connectors are plugged into the wheel position detect optic.

Symptom: After pressing the yellow reset button, the active lamp flashes indefinitely and will not stay off.
Solution: The vision system is not communicating with our SBC1188 computer. Restart the controller by pressing and releasing the red power button. After the controller turns off, press the red power button again to turn it back on. If this problem persists, the controller will have to be sent to our Repair Facility.

Symptom: When a game is started, the wheel does not turn to position 1, then the air comes on full speed.
Solution: The belt tension is too tight. Make sure the belt tension is properly set (see Wheel Motor Drive Assembly). If this problem persists, the wheel will have to be sent to our Repair Facility.

Blower problems

Symptom: The blower unit does not turn on.
Solution(s):
1. Replace the blower unit cable.
2. Replace the fuse on the rear panel of the AKV2100PC controller.
3. Replace the blower unit with your spare.

Symptom: The air flow is erratic.
Solution: Replace the blower unit.

Symptom: The high speed air flow is not turning on.
Solution(s):
1. Replace clogged air filters on the blower unit.
2. The air speed is set so high that high speed has no effect.
3. Replace the interface PCA inside the controller.

Symptom: The Air Speed knob is not changing air flow speed.
Solution(s):
1. Make sure the violet wires are connected to the air speed control inside the controller.
2. Replace the interface PCA inside the controller.

Symptom: The air hose keeps becoming disconnected from the blower or bowl assembly.
Solution: Make sure the hose clamps are being used on each end of the blower hose.

Symptom: The blower is noisy or vibrates.
Solution: Replace the blower unit with your spare.

Symptom: The Air Always On switch is not responding or does not change air speed.
Solution(s):
1. The air speed may be set so high that switching to high speed has no effect.
2. Make sure the blue wires are connected to the Air Always On switch inside the controller.
3. Replace the interface PCA inside the controller.

Voice Game Announcement Problems

Symptom: There is no voice output.
Solution(s):
1. Adjust the volume on your PA system.
2. Repair or replace the cable between our AKV2100PC Controller and your PA system.
3. Make sure the voice chip is installed correctly on the interface PCB.
4. Replace the interface PCA inside the controller.

Symptom: The voice speed is too fast or high pitched.
Solution: This always happens as a result of removing the Upper Assembly (wheel) without first turning off the controller. With the wheel at the home position, press and release the yellow Reset button on the front of the controller. When the Ready light comes on, you can continue game play.

Symptom: There is static or distorted audio.
Solution: With the wheel at the home position, press and release the yellow Reset button on the front of the controller. When the Ready light comes on, you can continue game play.

Repair Facility

The address of our repair facility is: Tripp Plastics
250 Greg Street
Sparks, NV 89431
Attn: Auto Keno Department

- Please make sure you fully insure the product for loss. Call us at 775-355-7552 to obtain a current value of the product. Ask for Auto Keno Sales.
- Make sure the product is properly packaged and protected. Refer to the second pages of drawings 150-10478 and 100-10253 for detailed packing information. Call us with any packaging questions.
- Our Auto Keno Service Department is available for assistance by calling 775-843-4931 24 hrs, 7 days a week. By calling this phone number you can receive operating and troubleshooting assistance. Please note: If you are having problems with your Keno System, please call the manufacturer of the equipment. In most cases, we cannot help you with problems concerning your Keno System.
- Please direct any product purchasing or shipping questions to 775-355-7552 8am to 5pm, Monday through Friday, PST.

DRAWINGS

This section contains drawings for various components of the AKV2100PC product.

The following drawings are included in this section:

100-10253 Base / Bowl Assembly
150-10478 Upper Assembly (wheel)
150-10634 AKV2100PC System
150-11028 Blower Motor

NOTES